

CLEAN COPY OF CLAIMS
PATENT NO. 6,166,176

1. An isolated molecule consisting of amino acids in a sequence encoded by a cDNA molecule, said cDNA molecule consisting of the nucleotide sequence designated SEQ ID NO:1.
2. A vaccine comprising an isolated immunologically active molecule comprising an amino acid sequence selected from the group consisting of sequences encoded by a cDNA molecule with a nucleotide sequence shown in FIG. 1 and designated SEQ ID NO:1, the sequence shown in FIG.2 and designated SEQ ID NO:2, the peptide Ala Pro Pro Glu Asp Asn Pro Val Glu Asp as shown in SEQ ID NO:6, the peptide Glu Glu Gln Gln Glu Val Pro Pro Asp Thr as shown in SEQ ID NO:7, the peptide Asp Gly Pro Thr Gly Glu Pro Gln Gln Glu as shown in SEQ ID NO:8, the peptide Gln Glu Asn Pro Asp Ser Ser Glu Pro Val as shown in SEQ ID NO:9, and combinations of members of the group.
3. An isolated molecule consisting of an amino acid sequence selected from the group consisting of Ala Pro Pro Glu Asp Asn Pro Val Glu Asp designated SEQ ID NO:6, Glu Glu Gln Gln Glu Val Pro Pro Asp Thr designated SEQ ID NO:7, Asp Gly Pro Thr Gly Glu Pro Gln Gln Glu designated SEQ ID NO:8, and Gln Glu Asn Pro Asp Ser Ser Glu Pro Val designated SEQ ID NO:9.
4. An isolated molecule consisting of amino acid residues 3-8 of SEQ. ID NO: 8.
5. The isolated molecule of claim 1 further defined as purified.
6. An isolated molecule consisting of an amino acid sequence designated SEQ ID NO:2.
7. A vaccine comprising an immunologically active molecule of claim 3.